

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (EMERGENCY MEDICINE) EXAMINATION
OCTOBER/NOVEMBER 2019

Date :- 28th October 2019

Time: 1.00 p.m. – 4.00 p.m.

STRUCTURED ESSAY QUESTION PAPER

Answer all ten (10) questions.

Answer each question in a separate book.

1. A 35-year-old pregnant woman at 37 weeks with her fourth child was brought to the Emergency Department with abdominal pain and delivered her baby before she could be transferred to the maternity unit. The baby is well, but the mother is bleeding heavily, and you are asked to review her before transfer to the maternity unit.

On examination she is pale and her vital signs are:

Temperature	37°C
Pulse rate	110 beats/minute
Blood pressure	87/65 mmHg
Respiratory rate	25/minute
Oxygen saturation	96% on air

- 1.1. Outline your further assessment of this patient. (30 marks)
- 1.2. Briefly describe your management of this patient. (50 marks)

You are a new Emergency Department consultant and the Hospital Director asks you to devise a protocol to manage patients who present to the ED with major post-partum haemorrhage.

- 1.3. Name the key personnel you would need to consult and key components of the protocol. (20 marks)

Contd..../2-

2. A 6-year-old boy is admitted to the Emergency Department with a painful right arm and a history of a fall at home. You believe he has a closed fracture of the forearm.

2.1. Briefly describe the pain management options for this child. (30marks)

While caring for the boy, the mother tells your team that her husband has hit her son with an iron bar, and that she is pregnant and he has also been hitting her.

2.2. What further history and examination will you need to elicit, to determine your management plan? (40 marks)

2.3. List the specialties and services that will need to be involved in managing this patient and this situation. (30 marks)

3. A 75-year-old man presents to the emergency department vomiting fresh blood. He has a past history of atrial fibrillation for which he is on warfarin and beta blockers.

His initial observations are:

Heart rate	85 beats/minute
Blood pressure	75/40 mmHg
Respiratory rate	20/minute
Oxygen saturation	95% on air
GCS	15/15

3.1. List the first three (03) steps in your immediate management. (15 marks)

3.2. Name two (02) treatments you would administer as soon as possible considering his anticoagulation? (20 marks)

3.3. On examination you note that he is jaundiced with evidence of ascites. What is the most likely source of bleeding? (10 marks)

3.4. Name four (04) pharmacological agents that may be used in the initial medical management of this condition. (25 marks)

3.5. If your initial management does not control the bleeding and endoscopy is not immediately available name the procedure you could carry out in the emergency department?
Briefly outline each step in this procedure. (30 marks)

Contd.../3-

4. A 65-year-old man presents to the Emergency Department with a 2 day history of severe acute back pain and difficulty in passing urine. There is no history of trauma. He is no longer able to cope with the pain despite regular analgesia and is finding it difficult to walk as his legs feel weak.
- 4.1. What is the most important diagnosis to consider in this patient? (15 marks)
- 4.2. Outline four (04) key features in the history and four (04) findings on examination that would support this diagnosis. (40 marks)
- 4.3. What are the most common causes of this condition and what further features in the history or examination may give you a clue to aetiology? (25 marks)
- 4.4. What are the three (03) most important management priorities for this patient? (20 marks)
5. A 2-month-old baby presented with worsening difficulty in breathing over the last 2 days. He was delivered by normal vaginal delivery and birth weight was 3.0 Kg. The mother gives a history of poor feeding associated with head sweating for the last month. His sibling at home is presently being treated for a cough and cold.
- On examination he is lethargic, has poor eye contact and nasal flaring. His temperature 37.8°C, heart rate 170 beats/minute, respiratory rate 80/minute, blood pressure 70/50 mmHg, Saturation 90% on air.
- 5.1. Name five (05) features in the history and examination which will indicate congestive cardiac failure. (15 marks)
- 5.2. What are the common causes for cardiac failure at this age? (20 marks)
- 5.3. List three (03) investigations that could be performed to confirm the diagnosis. (30 marks)
- 5.4. Give four (04) important steps in your initial management of this baby (20 marks)
- 5.5. List three (03) medications that could be prescribed for this baby for congestive cardiac failure. (15 marks)

6. A 16-year-old school girl was admitted to the Emergency Department of Teaching Hospital Kurunegala, suspected of having ingested some poisonous seeds 30 minutes prior to admission. She complained of dizziness and vomiting. On examination, she was restless, pulse rate was 40 beats/minute, blood pressure was 85/55 mmHg.
- 6.1. What is the most likely seed she would have ingested? State its active agent which causes this clinical syndrome. (10 marks)
- 6.2. Briefly explain the mechanism of action of the active agent given in 6.1. (20 marks)
- 6.3. List two (02) investigations you would carry out immediately in this patient, giving reasons and expected findings. (10 mark)
- 6.4. Briefly describe the immediate management of this patient. (25 marks)
- 6.5. Her ECG is attached. What is your ECG diagnosis? (10marks)
- 6.6. Describe the pharmacological and non pharmacological management of this patient. (25 marks)
7. A 30-year-old motorcyclist is brought to the Emergency Department following a collision with a bus. He was found 10 meters away from his motorbike. On admission he is restless and unresponsive. Radial pulses are feeble with a heart rate 140/ minute, systolic blood pressure reading of 70 mmHg and respiration 22/minute. Further examination reveals bruising over the mid chest. There are no external injuries elsewhere.
- 7.1. List four (04) possible internal injuries that can explain these findings. (20 marks)
- 7.2. Explain how each of the above injuries results in the observations noted. (20 marks)
- 7.3. Outline your general immediate management. (30 marks)
- 7.4. Outline your definitive management for each of the above conditions you mentioned. (30 marks)

8. A 50-year-old female following total thyroidectomy for papillary carcinoma was discharged 24 hours following surgery. She had an uneventful intra and post operative period. Six hours following discharge she presented to the Emergency Department with difficulty in breathing and swallowing. Her SpO₂ was 92% on air, heart rate 90 beats/minute, blood pressure 120/70 mmHg.

8.1. What is the most likely complication that has occurred in this patient? (10 marks)

8.2. Outline your immediate management. (30 marks)

8.3. Categorize the equipment, drugs and personnel you would organize for further management. (30 marks)

Patient deteriorates further. SpO₂ 88%, heart rate 120 beats/minute, blood pressure 110/70 mmHg.

8.4. Outline your next steps in management. (30 marks)

9. A 54-year-old woman with a history of gall stones presents with colicky right hypochondrial pain, jaundice and fever with chills and rigors. On examination she looks ill with a respiratory rate of 20/minute, heart rate 120 beats/minute and a blood pressure of 110/70 mmHg. Abdomen is mildly distended with severe tenderness in the right hypochondrium.

9.1. What is the most probable diagnosis? (10 marks)

9.2. Briefly discuss the initial management. (40 marks)

9.3. List four (04) diagnostic investigations. (20 marks)

9.4. Indicate the further management steps. (30 marks)

10.

10.1. State the difference between a peer review and a medical audit. (10 marks)

10.2. Outline the audit cycle. (30 marks)

10.3. Define the term "closing the audit loop". (10 marks)

10.4. List key elements of clinical governance. (30 marks)

10.5. Briefly describe a model to evaluate the occurrence of human error. (20 marks)

Q. 6
6.5.

